AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-47 (Cancelled).

48. (Currently Amended) A process for manufacturing a tyre comprising the steps of:

providing an elastomeric layer on an outer surface of a toroidal support, said surface having a shape substantially matching a shape of an inner surface of said tyre;

manufacturing a green tyre by assembling the structural elements thereof on the toroidal support provided with the elastomeric layer;

introducing the green tyre supported on the toroidal support into a moulding cavity whose inner walls have a shape substantially matching a shape of an outer surface of the tyre;

at least partially precuring the elastomeric layer by heating the toroidal support;

introducing a primary working fluid into at least one diffusion gap defined between the inner surface of the green tyre and the toroidal support in order to press the outer surface of the green tyre against the inner walls of the moulding cavity; and

curing the green tyre,

wherein at least a portion of the radially inner surface of the toroidal support is provided with a plurality of protruding elements,

wherein said protruding elements are distributed on the radially inner surface of the toroidal support corresponding to the crown portion of the green tyre, and

wherein said protruding elements lie in a plane substantially perpendicular to the equatorial plane of the toroidal support.

49. (Previously Presented) The process according to claim 48, wherein the protruding elements are in the form of elongated ribs.

50. (Withdrawn) The process according to claim 48, wherein the protruding elements define a honeycomb structure.

51. (Previously Presented) The process according to claim 48, wherein the protruding elements protrude inwardly the toroidal support.

52. (Previously Presented) The process according to claim 48, wherein the protruding elements are obtained in a thickness of the toroidal support.

53. (Withdrawn) The process according to claim 48, wherein the protruding elements are produced separately from the toroidal support and successively coupled to the radially inner surface thereof.

54. (Withdrawn) The process according to claim 53, wherein the coupling of the protruding elements to the toroidal support is performed by welding.

55. (Previously Presented) The process according to claim 48, wherein the step of at least partially precuring the elastomeric layer is carried out after the step of providing the elastomeric layer on the outer surface of the toroidal support.

56. (Previously Presented) The process according to claim 48, wherein the step of at least partially precuring the elastomeric layer is carried out after the step of manufacturing the green tyre on said toroidal support.

57. (Previously Presented) The process according to claim 48, wherein the heating of the toroidal support is carried out by introducing the primary working fluid into said at least one diffusion gap.

58. (Previously Presented) The process according to claim 57, wherein the outer surface of the toroidal support is heated to a predetermined working temperature for precuring the inner surface of the green tyre.

59. (Previously Presented) The process according to claim 48, further comprising the step of pressing the inner surface of the green tyre against the outer surface of the toroidal support through at least one secondary working fluid.

60. (Previously Presented) The process according to claim 59, wherein during said step of pressing the pressure of the secondary working fluid is greater than the pressure of the primary working fluid.

61. (Previously Presented) The process according to claim 48, wherein the pressure of the primary working fluid is lower than 16 bar.

62. (Previously Presented) The process according to claim 59, wherein the pressure of the secondary working fluid is 8 to 18 bar.

63. (Previously Presented) The process according to claim 48, wherein during the step of pressing the outer surface of the green tyre against the walls of the moulding cavity by means of the primary working fluid, the pressure of the primary working fluid is 18 to 35 bar.

64. (Previously Presented) The process according to claim 48, wherein the temperature of the primary working fluid is 170° C to 210° C.

65. (Previously Presented) The process according to claim 48, wherein the primary working fluid is steam, nitrogen, air, or a mixture thereof.

66. (Withdrawn) The process according to claim 59, wherein the step of pressing is carried out before the step of heating the toroidal support.

67. (Withdrawn) The process according to claim 59, wherein the step of pressing is carried out after the step of heating the toroidal support.

68. (Previously Presented) The process according to claim 59, wherein the step of pressing is carried out simultaneously with the step of heating the toroidal support.

69. (Previously Presented) The process according to claim 52, wherein the protruding elements are obtained by milling.

Claims 70-94. (Cancelled)